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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,194	08/22/2006	Taketoshi Chifu	038919.58166US	6940
23911 7590 03/16/2009 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER CHARLES, MARCUS	
			ART UNIT 3656	PAPER NUMBER
			MAIL DATE 03/16/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,194	Applicant(s) CHIFU ET AL.	
	Examiner Marcus Charles	Art Unit 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the submission /amendment filed 12-17-2008, which has been entered. Claims 1-3 are currently pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hagiwara (6,908,231). Hagiwara disclose the claimed invention including the hub unit having an outer ring (3) having two raceways (10, 12), a hub (4) having mounting flange (9), a first raceway for accommodating a plurality of bearing balls (6); the hub having an inner ring (5) fixed at one end thereof, the inner ring having a raceway (12) for accommodating a plurality of bearing balls; the ring is fixed by the plastically deforming of the end portion of the hub in the radially outward direction; the bearing balls are provided between the two sets of raceways of the outer ring and the first and second raceways of the hub; wherein the outer diameter of a portion of the end of the hub to be plastically deformed is made smaller than the inner diameter of a portion of the inner ring that is fitted on the hub; the start point of the small diameter (37) is arranged to be situated between the start point of the chamfered portion (35) on the inner circumferential inner surface of the inner ring portion and the vehicle center side end face of the inner ring. Alternatively, It

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would have been obvious to one of ordinary skill in the art at the time of the invention shape the chamfered portion of the inner ring so that the start point of the small diameter portion is arranged so as to be situated between the start point of the chamfered portion on the inner ring and the end face of the inner ring element, since it held that a change in the basic shape of a known apparatus would have been an obvious improvement. In re Dailey, 149 USPQ 47 (CCPA 1976).

In claim 3, note Hagiwara (6,908,231) discloses the portion to be plastically deformed portion (37) is 0.01 to 0.5 mm smaller than the inner diameter of the inner ring (5).

3. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by JP (2005-138653). JP (2005-138653) discloses the claimed invention including the hub unit having an outer ring (1) having two raceways (1a), a hub (2) having a mounting flange (4a), a first raceway (1a) for accommodating a plurality of rollers (3); the hub having an inner ring (2a) fixed at one end thereof, the inner ring having a raceway (1a) for accommodating a plurality of bearing rollers; the ring is fixed by the plastic deformation of the end portion (4c) of the hub in the radially outward direction; the bearing rollers are provided between the two sets of raceways of the outer ring and the first and second raceways of the hub; a continuous circumferential groove (not properly labeled) is provided on the inner circumferential surface of the inner ring element adjacent to a chamfered portion on an inner end portion of the inner circumferential surface at an axially more vehicle center side than the second bearing track.

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4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the prior art cited in attached PTO Form 892.

Response to Arguments

5. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Marcus Charles

/Marcus Charles/

Primary Examiner, Art Unit 3656

【图 2】

